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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/465,056 12/16/99 WEISS

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MM92/0705

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WORCESTER MA 01608

NGUYEN, T

EXAMINER

ART UNIT	PAPER NUMBER
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2833

DATE MAILED:
07/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.

09/465,056

Applicant(s)

WEISS, ROGER E.

Examiner

Truc T. T. Nguyen

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 1,8,13-17,20-22 and 25-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9-12,18,19,23 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 13-14, 20-21, and 35 are directed to an invention that is independent or distinct from the invention claimed for the following reasons:

These claims are referring directly to Species 13 (Figure 14, claims 13 and 20) and species 14 (Figure 16, claims 14, 21, and 35).

Accordingly, claims 13-14, 20-21, and 35 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

In Specie 1, the “pads” do not comprise one or more layer of metal and are not together form an array of electrically conductive pads across one or more of the matrix surface.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-3, 7, 9, 10-12, 18, and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Jin et al (US 5,618,189).

Regarding claim 1, Jin et al disclose an elastomeric device comprising:

an elastomeric matrix (73);

one or more electrically conductive pathways (un-numbered, see Figure 9);

one or more electrically conductive contact pads (91, 92);

Regarding claim 2, Jin et al disclose one or more means (91) for providing a flow space (un-numbered, a space between contact pads 91, Figure 9).

Regarding claim 3, Jin et al disclose the means comprises one or more compressible microspheres imbedded in the matrix (see Figure 9).

Regarding claim 7, Jin et al disclose said means comprises one or more spaces formed between two or more of said pads.

Regarding claim 9, Jin et al disclose the pathways comprises a plurality of conductive particles (71), and said means for providing flow space comprises one or more spaces formed between two or more of said particles.

Regarding claim 10, Jin et al disclose the pathways are anisotropic and comprise up to about 25% magnetic particles (see column 5, lines 6-28).

Regarding claim 11, Jin et al disclose the plurality of the magnetic particle are aligned to formed one or more array of electrically isolated column having at least one end, wherein one or more of said pads is in contact with an end of one or more of said columns of particles.

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Regarding claim 12, Jin et al disclose one or more of said pathways comprises a plurality of particles aligned to form a column having at least one end, wherein one or more of said pads is in contact with at least of said ends of one or more of said columns of particles.

Regarding claim 18, Jin et al disclose one or more pathways comprises a plurality of electrically conductive particles aligned in a column having at least one end particle coated with a metal (72).

Regarding claim 23, Jin et al disclose one or more of said pathways comprise a plurality of conducting particles aligned in one or more columns having at least one end particle, and wherein one or more of said pads form a bond with said matrix and with one or more of said end particles.

Regarding claim 24, Jin et al disclose the outer surface of the matrix comprise a first surface adapted to face one component (93) and a second surface adapted to face a second component (94).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jin et al (US 5,618,189).

Regarding claim 5, Jin et al substantially disclose the claimed invention except said means for providing flow space comprises one or more gas particles.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a gas particle into Jin et al's contact pads. Since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 6, Jin et al substantially disclose the claimed invention except the gas particle are of a size of 20% or less than the size of the conducting particles.

It would have been an obvious matter of design choice to change the size of the gas particle to be 20% less than the size of the conducting particles, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claim 19, Jin et al substantially disclose the claimed invention except the matrix comprises one or more elastomers which retains about 90% or more of its modulus of compression over a temperature range of between about -50 degree Celsius to 200 degree Celsius.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide about 90% or more of elastomer into the Jin et al's. Since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416

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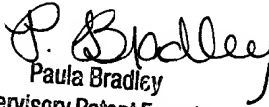
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T. T. Nguyen whose telephone number is 703-306-4004. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on 703-308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

T. Nguyen
July 2, 2001


Paula Bradley
Supervisory Patent Examiner
Technology Center 2800